Amendments to the Claims:

1. **(Original)** A multiplexer which generates data by assigning different packet identifiers to (i) one of coded video data and coded audio data, and (ii) table data regarding the coded data, and packet-multiplexing the coded data and the table data, said multiplexer comprising:

a sub-descriptor generating unit operable to generate sub-descriptors, each of which includes a sub-tag value representing a type of side information, and the side information, the side information representing a parameter for decoding the coded data;

a main descriptor generating unit operable to generate a main descriptor which includes the sub-descriptors generated by said sub-descriptor generating unit, and a main tag value representing a set of the sub-descriptors; and

a table generating unit operable to generate the table data, by associating the main descriptor generated by said main descriptor generating unit, with the packet identifier of the coded data,

wherein said sub-descriptor generating unit is operable to output the sub-descriptors in an order defined by a predetermined storage rule.

2. **(Original)** The multiplexer according to Claim 1,

wherein the storage rule defines that the sub-descriptors are to be stored in an ascending order of the sub-tag values, the sub-tag values being natural numbers.

3. **(Original)** The multiplexer according to Claim 1,

wherein the storage rule defines that the sub-descriptors are to be classified into groups according to when the sub-descriptors are standardized, and a sub-descriptor belonging to a group standardized earlier is to be stored prior to a sub-descriptor belonging to a group standardized later.

4. **(Original)** The multiplexer according to Claim 1,

wherein said sub-descriptor generating unit includes an internal memory in which the generated sub-descriptors can be stored, and

is operable to sort the sub-descriptors to be outputted in the order defined by the storage rule, when the sub-descriptors are not stored in the order in the internal memory.

5. **(Currently amended)** The multiplexer according to Claim 1, further comprising:

a management information generating unit operable to multiplex flag information for specifying the storage rule of the side information, into management information regarding the packet-multiplexed data ~~packet-multiplexed by said multiplexing unit~~; and

a linking unit operable to link the management information with the packet-multiplexed data.

6. **(Original)** An information recording medium in which data is recorded, the data being generated by assigning different packet identifiers to (i) one of coded video data and coded audio data, and (ii) table data regarding the coded data, and packet-multiplexing the coded data and the table data,

wherein the table data has a main descriptor which includes: sub-descriptors, each of which includes a sub-tag value representing a type of side information representing a parameter for decoding the coded data, and the side information; and a main tag value representing a set of the sub-descriptors, and

the sub-descriptors are stored in an order defined by a predetermined storage rule.

7. **(Original)** The information recording medium according to Claim 6,

wherein management information linked to the packet-multiplexed data is further recorded, and

in the management information, flag information representing the storage rule of the sub-descriptors is multiplexed.

8. **(Original)** A decoder which obtains data that is generated by assigning different packet identifiers to (i) one of coded video data and coded audio data, and (ii) table data regarding the coded data, and packet-multiplexing the coded data and the table data, said decoder comprising:

a de-multiplexing unit operable to de-multiplex the coded data and the table data from the packet-multiplexed data, by referring to the packet identifiers;

an information analyzing unit operable to analyze a sub-descriptor identified by a main tag value stored in the de-multiplexed table data, and extract side information of the analyzed sub-descriptor; and

a data decoding unit operable to decode the coded data based on the extracted side information.

9. **(Original)** The decoder according to Claim 8,

wherein said information analyzing unit is operable to terminate the analyzing, when the sub-descriptor cannot be analyzed.

10. **(Original)** The decoder according to Claim 8,

wherein said information analyzing unit is operable to select, as an effective sub-descriptor, a sub-descriptor positioned more backwards in plural sub-descriptors having the same value, when the plural sub-descriptors are detected from the table data.

11. **(Original)** A multiplexing method of generating data by assigning different packet identifiers to (i) one of coded video data and coded audio data, and (ii) table data regarding the coded data, and packet-multiplexing the coded data and the table data, said method comprising steps of:

generating sub-descriptors, each of which includes a sub-tag value representing a type of side information, and the side information, the side information representing a parameter for decoding the coded data;

generating a main descriptor which includes the sub-descriptors generated in said generating of the sub-descriptors, and a main tag value representing a set of the sub-descriptors; and

generating the table data, by associating the main descriptor generated in said generating of the main descriptor, with the packet identifier of the coded data,

wherein in said generating of the sub-descriptors, the sub-descriptors are outputted in an order defined by a predetermined storage rule.

12. **(Original)** A program which causes a computer to execute the steps in the multiplexing method according to the Claim 11.

13. **(Original)** A decoding method of obtaining data that is generated by assigning different packet identifiers to (i) one of coded video data and coded audio data, and (ii) table data regarding the coded data, and packet-multiplexing the coded data and the table data, said method comprising steps of:

de-multiplexing the coded data and the table data from the packet-multiplexed data, by referring to the packet identifiers;

analyzing a sub-descriptor identified by a main tag value stored in the de-multiplexed table data, and extract side information of the analyzed sub-descriptor; and

decoding the coded data based on the extracted side information.

14. **(Currently amended)** A program which causes a computer to execute the steps in the ~~multiplexing~~ decoding method according to the Claim 13.